A. Assignment 4, Sampling and estimation, winter semester 2012

For March 13

Should be done alone or in a group of two. Select an article from the list below. (No two persons/groups may choose the same article. You must tell me on a first come first served basis, which one you choose). Read it. Present the contents for your fellow students for about 8-12 minutes. (You may use overhead or power point if you want to). If a group of two, both persons must talk during the presentation. Roughly 8 minutes for one and 12 for two, marks will be given individually. All of you are expected to participate and listen to the others.

Advice - Instructions

These articles are scholarly papers on methods taken from the recent issues of central journals in statistics /survey field. The authors of them have generally worked for half a year or so with the contents. You should not expect to be able to understand every word in the articles in such a short time. However, you should understand the problem that the essay is about, the background and other related things.

Your presentation should be intended for your fellow students (and <u>not</u> for your teacher). You must give them enough information to decide whether the article or field sounds interesting and is worth reading to them.

The grading will take into account how good your presentation is, how well you seem to understand the issue and the contents but also how well the audience seems to understand the presentation. Those who sit and look uninterested during the presentations will thus pull down the marks of their comrades. Questions that show some understanding of the others' presentations are encouraged and may also raise your own rating slightly. The articles are of varying types, length and theoretical depth. It is not possible to find thirty equally long and equally difficult papers. This will be taken into account when assessing the grades. When two people present a paper together, their performance will to some extent to be assessed individually. The ability in English will, if possible, be disregarded.

Articles to choose from

All papers could be found in the department library and/or can be found on the Internet.

Belsby, Björnstad & Zhang, (2005), Modelling and estimation methods for household size in the presence of nonignorable nonresponse applied to the Norwegian Consumer Expenditure Survey, Survey Methodology, p 197

Benedetti Roberto, Bee Marco, Espa Giuseppe (2010) A Framework for Cut-off Sampling in Business Survey Design, Journal of Official Statistics, pp. 651–671 2010 **Taken by Bergrun** Van den Brakel & Renssen, (2000), A field experiment to test effects of an incentive and a condensed questionnaire on response rates in the Netherlands Fertility and Family Survey, Research in Official Statistics p 55 **Taken by Pinar &Heeva**

Buskirk & Meza, (2003), A post-stratified raking ration estimator linking national and state survey data for estimating drug use, Journal of Official Statistics, p 236 **Taken by Tania Tanu**

Chandra Hukum, Chambers Ray (2009) Multipurpose Weighting for Small Area Estimation, Journal of Official Statistics, pp. 379–395

Chipperfield James O., Steel David G (2009) Design and Estimation for Split Questionnaire Surveys , Journal of Official Statistics pp. 227–244

Davison A.C., Sardy S.(2007) Resampling Variance Estimation in Surveys with Missing Data, Journal of Official Statistics, pp. 371–386

Dorfman, Alan, Lent, Janice, Leaver, Sylvia G, and Wegman, Edward (2006) On Sample Survey Designs for Consumer Price Indexes, Survey Methodology 2

Dorsett Richard (2010) Adjusting for Nonignorable Sample Attrition Using Survey Substitutes Identified by Propensity Score Matching: An Empirical Investigation Using Labour Market Data, Journal of Official Statistics pp. 105–125

Fuller & Rao, (2001), A regression composite estimator with application to the Canadian Labour Force Survey, Survey Methodology, p 45,

Hagesæther Nina, Zhang Li-Chun (2009) A Note on the Effect of Auxiliary Information on the Variance of Cluster Sampling Journal of Official Statistics pp. 397–404

Horgan (2006) Stratification of Skewed Populations - A Review, International Statistical Review, p 67,

Kalton & Flores-Cervantes, (2003), Weighting methods, Journal of Official Statistics, p 81 **Taken by Xioulu Cao**

Knottnerus Paul and van Duin Coen, (2006) Variances in Repeated Weighting with an Application to the Dutch Labour Force Survey, Journal of Official Statistics, pp. 565–584

Lee, (2006), Propensity score adjustment for volunteer panel web surveys, Journal of Official Statistics, p 329, **Taken by Magnus and Gustav**

Mohadjer Leyla and Curtin Lester R.: (2008) Balancing sample design goals for the National Health and Nutrition Examination Survey, Survey Methodology, vol 1

Pfeffermann Danny, Terryn Bénédicte and Moura Fernando A.S.(2007) Small area estimation under a two-part random effects model with application to estimation of literacy in developing countries Survey Methodology

Pfefferman. (2002), Small area estimation – new developments and directions, International Statistical Review, p 125

Qualité Lionel and Tillé Yves (2008), Variance estimation of changes in repeated surveys and its application to the Swiss survey of value added, Survey Methodology Vol 2

Rosén (2000) On inclusion probabilities order π ps-sampling, Journal of statistical planning and inference, p 117

Särndal Carl-Erik, Lundström Sixten,(2008) Assessing Auxiliary Vectors for Control of Nonresponse Bias in the Calibration Estimator, Journal of Official Statistics, JOS pp. 167–191

Schouten Barry, Cobben Fannie and Bethlehem Jelke (2009) Indicators for the representativeness of survey response Survey Methodology vol 1

Slud Eric V., Bailey Leroy (2010) Evaluation and Selection of Models for Attrition Nonresponse Adjustment, Journal of Official Statistics, pp. 127–143

Volz & Heckathorn, (2008), Probability based estimation theory for respondent driven sampling, Journal of Official Statistics, p79

Wolter Kirk M., Smith Phil and. Blumberg Stephen J, (2010), Statistical foundations of cellphone surveys Survey Methodology vol

Zhang, Li Shun (2003), Multiple Imputation: Theory and Method, International Statistical Review, p 581